

WHAT IS CLAIMED IS:

1. A system for cooling a processor, the system comprising
a hybrid module configured to be thermally coupled to the processor and to a fansink, the hybrid module comprising:
an air channel adapted for removing heat from the processor; and
a fluid channel adapted for further removing heat from the processor.
2. The system of claim 1, wherein the fluid channel is a closed loop channel.
3. The system of claim 1, wherein the hybrid module is coupled to a pump adapted for circulating the heat transfer fluid through the fluid channel.
4. The system of claim 3, wherein the heat transfer fluid in the fluid channel transports heat from the processor to a heat exchanger.
5. The system of claim 1, wherein a bottom plate of the fluid channel is textured.
6. The system of claim 5, wherein the texture of the bottom plate comprises a plurality of pins extending upward into the fluid channel.
7. The system of claim 1, wherein the hybrid module is adapted for dissipating heat from the processor through air, through a fluid, or through both air and fluid.

8. The system of claim 1, further comprising a thermal adhesive disposed on a bottom plate of the hybrid module for thermally coupling the hybrid module to the processor.
9. The system of claim 1, wherein the fansink comprises:
a fan; and
an air channel
wherein the fansink is configured to be thermally coupled to the processor.
10. The system of claim 9, wherein the fansink is configured to force air through the air channel.
11. The system of claim 9, wherein the fansink and the hybrid module are adapted for simultaneous operation.
12. The system of claim 9, wherein the fansink and the hybrid module are adapted for independent operation.
13. The system of claim 1, wherein the processor comprises a graphics processing unit.
14. The system of claim 1, wherein the processor comprises a central processing unit.

15. The system of claim 1, wherein the processor comprises an application-specific integrated circuit.
16. The system of claim 1, wherein the system is sized to cool a memory chip in addition to the processor.
17. A method for cooling a processor, the method comprising the steps of:
continually cooling the processor using forced air to remove heat from the processor;
monitoring a temperature of the processor; and
circulating a heat transfer fluid in a fluid channel to further remove heat from the processor when the processor reaches a threshold temperature.
18. The method of claim 17, further comprising the step of ceasing to circulate the heat transfer fluid when the processor is cooled to a desired temperature.
19. The method of claim 17, wherein the heat transfer fluid is circulated by turning on a pump.
20. The method of claim 18, further comprising the step of transporting the heat transfer fluid through a heat exchanger.